

The Knowledge Bank at The Ohio State University
Ohio State Engineer

Title: Front Matter

Issue Date: Jan-1932

Publisher: Ohio State University, College of Engineering

Citation: Ohio State Engineer, vol. 15, no. 3 (January, 1932), 1-3.

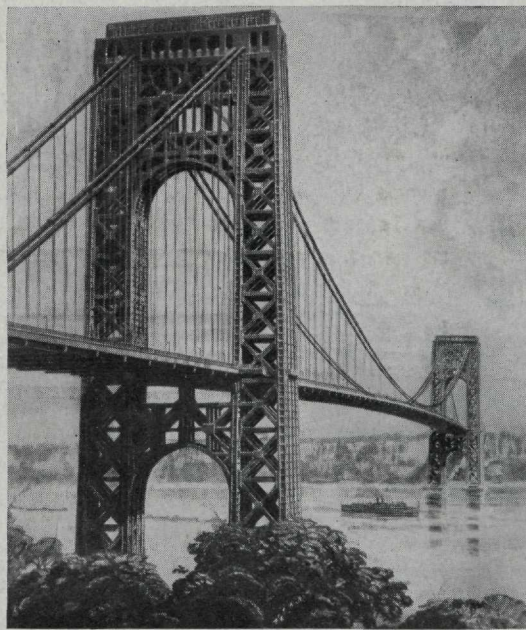
URI: <http://hdl.handle.net/1811/34861>

Appears in Collections: [Ohio State Engineer: Volume 15, no. 3 \(January, 1932\)](#)

OHIO STATE UNIVERSITY,
BROWN HALL LIBRARY.

JAN 29 1932

The
**Ohio State
Engineer**



Vol 15 # 3

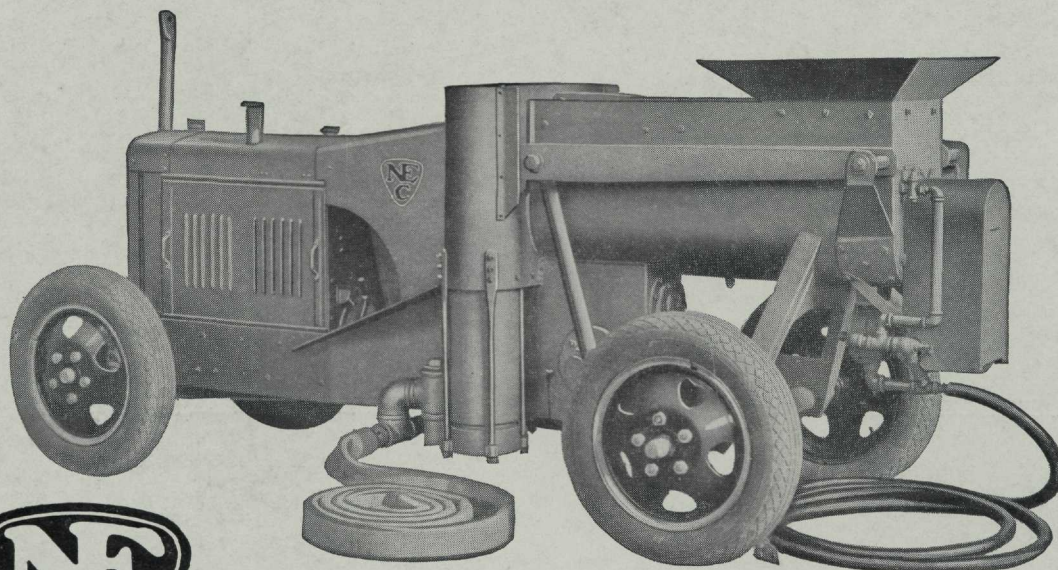
JANUARY 1932

MEMBER OF ENGINEERING COLLEGE MAGAZINES ASSOCIATED

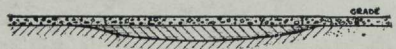
TA
1
036
V.15, no. 3
Jan. 1932
copy 3

C. E. Sherman

MUD-JACK CORRECTS SETTLED PAVEMENTS



The principle of operation of the Mud-Jack is based upon the well known law of hydrostatics that "pressure is exerted with equal intensity in all directions". It is the same principle which is applied in the operation of hydraulic elevators or pneumatic lifts. A pressure of 1 lb. per sq. in. exerted by the machine is more than sufficient to raise the pavement. Higher pressures are sometimes necessary first to pry the slab loose from the sub-grade.



A SPECIAL combination mixer and pump, the Mud-Jack, has been developed by National Equipment Corporation for correcting settlements in rigid types of pavements. It mixes earth and water, with sufficient cement to take up the shrinkage, and then forces the mixture through holes drilled in the slab.

Without detouring traffic, the portable Mud-Jack brings the slab back to the original grade at a very small cost. Dips from 1" to 18" deep are corrected with equal ease—and future settlements can be corrected even more economically.

The actual operation of the machine begins with a mixing action in the tank which contains a number of revolving paddles. A mobile mixture of soil, cement and water flows into two large cylinders, one at each side of the machine. Pistons then force the mud from these cylinders through a 2½ inch hose into holes drilled through the concrete slab.

The Mud-Jack, one of the many products built by National Equipment Corporation, reflects the continued progress of N. E. C. in highway machinery and N. E. C. leadership in engineering development.

National Equipment Corporation

N. 30th St. & W. Concordia Ave.,
Milwaukee, Wisconsin



*Who are you betting on to win the
Ohio State Engineer Scholarship?*

Why not yourself?

Watch the thermometer in the College office.



See page 12

THE MILITARY BALL

WILL BE HELD THIS YEAR AT

THE ARMORY



Which will be decorated for the occasion with the most brilliant color ever known to Ohio State. With a false ceiling the Armory will offer a gay retreat for the Annual Military Festival



KAY KAISER'S ORCHESTRA



TIME 9-1 FRIDAY, FEBRUARY 5
ASSESSMENT \$2.00 PER COUPLE

THE OHIO STATE ENGINEER

Published in October, November, January, February, March, April, and May by the students in the College of Engineering, The Ohio State University, Columbus, Ohio

Vol. XV

JANUARY, 1932

No. 3

CONTENTS

SKYSCRAPERS—PROF. C. T. MORRIS	5
TEN THOUSAND MILES OF HITCH-HIKING—E. M. SEVCIK, '31	7
EDITORIALS	8
ENGINEERING ABSTRACTS	10
BOOKSHELF	14
ALUMNI NEWS	16
CRANKS AND COUNTERSHAFTS	18
COVER CUT—Courtesy <i>Engineering-News Record</i>	

Subscription price, \$1.00 per year for seven copies; single copies 20c each. Make checks and money orders payable to *The Ohio State Engineer*.

Entered as second-class matter May 15, 1922, at the post office at Columbus, Ohio, under the act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of October 3, 1917. Authorized December 8, 1922.

MEMBERS OF THE ENGINEERING COLLEGE MAGAZINES ASSOCIATED

Chairman: Willard V. Merrihue, 1 River Road, Schenectady, New York

The Transit	The Ohio State Engineer	The Technograph
Iowa Engineer	Penn State Engineer	Pennsylvania Triangle
Colorado Engineer	Minnesota Techno-Log	Kansas Engineer
Nebraska Blue Print	Armour Institute Engineer	Oregon State Technical Record
Sibley Journal of Engineering	Wisconsin Engineer	The Purdue Engineer
Rose Technic	Tech Engineering News	The Auburn Engineer
Michigan Technic	Cornell Civil Engineer	The Marquette Engineer
	Kansas State Engineer	